# harman/kardon<sup>®</sup>

Power for the Digital Revolution.

# CDR 26DUAL-TRAY CD-R/CD-RW RECORDER/PLAYER OWNER'S MANUAL

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#### Typographical Conventions

In order to help you use this manual with the remote control, front-panel controls and rear-panel connections, certain conventions have been used.

**EXAMPLE** – (bold type) indicates a specific remote control or front-panel button, or rear-panel connection jack

**EXAMPLE** – (OCR type) indicates a message that is visible on the front-panel information display

1 – (number in a square) indicates a specific front-panel control

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- 1 (number in a circle) indicates a rear-panel connection
- A (letter in a square) indicates an indicator in the front-panel display

#### Thank you for choosing Harman Kardon.

The CDR 26 CD Player/Recorder is a unique product, designed not only to play back your existing library of compact discs, but also to record compact discs from either analog or digital programs. You may feed signals (for recording) to the CDR 26 from external sources such as an A/V receiver, a tuner, a tape deck or a CD player, or you may simply place a CD in one deck, and make a copy using a recordable CD in the other deck.

Designed and engineered by Harman Kardon, the CDR 26 is among the few audio CD recorders with 4x speed capability. This means that it will take only 15 minutes to copy a 60-minute disc.

The CDR 26 not only records with the highest speed and quality available but it is also an audiophile CD player. Through the use of audiophile-grade digital-toanalog converters (DACs), the CDR 26's performance rivals the most sophisticated high-end players. Should you wish to bypass the internal DACs and use an external digital processor, coax and optical digital outputs are available. Thanks to the CDR 26's dual-tray design, you may even set the CDR 26 to Continuous Play mode for parties or where background music is desired. To make CD playback more enjoyable, the CDR 26 also features a wide range of program and repeat functions.

Since CD recorders are a relatively new technology, this may be your first CD-R product. Although CD recorders resemble play-only CD machines in many ways, there are some important differences between a standard CD and a CD-R. In addition, making a CD-R recording is also a different process than what you may be familiar with for making audio tape or cassette recordings. For that reason, we encourage you to read through this manual so that you are fully acquainted with the way CD recording works. This small investment in your time will pay major dividends in the enjoyment that will result from proper use of the CDR 26.

If you have additional questions about this product, its installation or its operation that are not answered in this manual, please contact your dealer, who is your best source of local information. You may also contact Harman Kardon via e-mail through our Web site at www.harmankardon.com.

Special Features

- Dual-deck CD player and CD-R/CD-RW recorder
- 4x Dub speed for both CD-R and erasable CD-RW discs
- Audiophile-grade digital-to-analog converters for highest audio quality
- Continuous play capability
- Extensive playback programming capabilities
- Coaxial and optical digital inputs and outputs
- Front-panel coaxial and optical digital inputs for use with portable devices
- Sample-rate converter allows use of DAT players as digital source
- Ergonomic remote control

## Important Information About CD Recording

In order to get the most enjoyment from your new CD recorder, please pay special attention to the following sections of the manual that provide information about the features and capabilities of CD recorders.

- The CDR 26 plays all standard CD audio discs but for recording, the CDR 26 uses special CD-R and CD-RW discs designed only for audio use. CD-R discs designed for computer use will not work in the CDR 26. See page 14 for more information on which types of discs are used with the CDR 26.
- The last step in making a CD recording is the finalization process. Unless this step is properly done, the disc will not work in other players. See page 21 for information on finalizing discs.
- Once finalized, CD-R discs will play in any CD player, but CD-RW discs will only play in the CDR 26 and other machines specifically designed for compatibility with CD-RW discs. Check the specifications of your CD player if you have questions about compatibility with CD-RW discs.
- As with all CD players, except those designed specifically for portable use, you should never move a CD player while there is a disc inside one of the decks. DO NOT move the CDR 26 until discs have been removed from both decks.

#### Important Safety Information

#### Verify Line Voltage Before Use

Your CDR 26 has been designed for use with 100- to 240-volt AC current. Connection to a line voltage other than that for which it is intended can create a safety and fire hazard and may damage the unit.

If you have any questions about the voltage requirements for your specific model, or about the line voltage in your area, contact your selling dealer before plugging the unit into a wall outlet.

#### Do Not Use Extension Cords

We do not recommend that extension cords be used with this product. As with all electrical devices, do not run power cords under rugs or carpets or place heavy objects on them. Damaged power cords should be replaced immediately by an authorized service depot with cords meeting factory specifications.

#### Handle the AC Power Cord Gently

When disconnecting the power cord from an AC outlet, always pull the plug; never pull the cord. If you do not intend to use the unit for any considerable length of time, disconnect the plug from the AC outlet.

#### Do Not Open the Cabinet

There are no user-serviceable components inside this product. Opening the cabinet may present a shock hazard, and any modification to the product will void your guarantee. If water or any metal object such as a paper clip, wire or a staple accidentally falls inside the unit, disconnect it from the AC power source immediately, and consult an authorized service station.

**CAUTION:** The CDR 26 uses a laser system. To prevent direct exposure to the laser beam, do not open the cabinet enclosure or defeat any of the safety mechanisms provided for your protection. DO NOT STARE INTO THE LASER BEAM. To ensure proper use of this product, please read this owner's manual carefully and retain it for future use. Should the unit require maintenance or repair, please contact your local Harman Kardon service center. Refer servicing to qualified personnel only.

#### Installation Location

- To ensure proper operation and to avoid the potential for safety hazards, place the unit on a firm and level surface. When placing the unit on a shelf, be certain that the shelf and any mounting hardware can support the weight of the product.
- Make certain that proper space is provided both above and below the unit for ventilation. If this product will be installed in a cabinet or other enclosed area, make certain that there is sufficient air movement within the cabinet.
- Do not place the unit directly on a carpeted surface.
- Avoid installation in extremely hot or cold locations, or an area that is exposed to direct sunlight or heating equipment.
- Avoid moist or humid locations.
- Do not obstruct the ventilation slots on the top of the unit, or place objects directly over them.

#### Cleaning

When the unit gets dirty, wipe it with a clean, soft dry cloth. If necessary, wipe it with a soft cloth dampened with mild soapy water, then a fresh cloth with clean water. Wipe dry immediately with a dry cloth. NEVER use benzene, aerosol cleaners, thinner, alcohol or any other volatile cleaning agent. Do not use abrasive cleaners, as they may damage the finish of metal parts. Avoid spraying insecticide near the unit.

#### Moving the Unit

Before moving the unit, be certain to disconnect any interconnection cords with other components, and make certain that you disconnect the unit from the AC outlet.

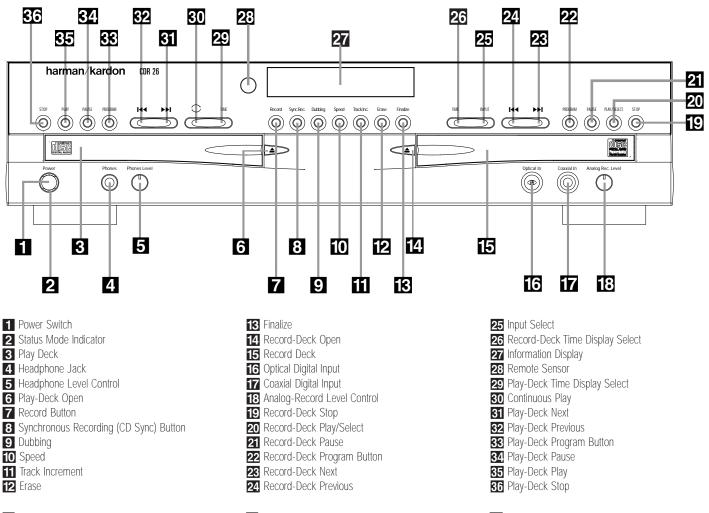
IMPORTANT NOTE: To avoid damage to the CDR 26 which may not be covered by the warranty, be certain that all discs are removed from the unit before it is moved. Once the CDR 26 is installed, discs may be left in the unit when it is turned off, but the unit should NEVER be moved with discs left in either deck.

#### Unpacking

The carton and shipping materials used to protect your new receiver during shipment were specially designed to cushion it from shock and vibration. We suggest that you save the carton and packing materials for use in shipping if you move, or should the unit ever need repair.

To minimize the size of the carton in storage, you may wish to flatten it. This is done by carefully slitting the tape seams on the bottom and collapsing the carton down to a more two-dimensional appearance. Other cardboard inserts may be stored in the same manner. Packing materials that cannot be collapsed should be saved along with the carton in a plastic bag.

If you do not wish to save the packaging materials, please note that the carton and other sections of the shipping protection are recyclable. Please respect the environment and discard those materials at a local recycling center.



**1** Power Switch: Press this switch to apply power to the CDR 26. When the unit is first turned on, the Status Mode Indicator **2** surrounding the switch will turn green. Once the unit has been turned on with this switch, it may be operated from either the front panel or remote control. Press the switch again to turn the unit completely off.

**2** Status Mode Indicator: When the CDR 26 is in the ON mode, this indicator will glow green. When the unit has been placed in the Standby mode by pressing the **Power-Off Button 30** on the remote, the indicator will glow amber, indicating that the unit is still connected to the AC main supply and is ready to be turned on from the remote control.

**3** Play Deck: This disc deck is used to play back conventional CD discs and CD-R or CD-RW discs that have been finalized.

**4** Headphone Jack: Connect standard headphones to this jack for private listening.

**5** Headphone Level Control: Turn this control to adjust the volume level to the headphones. Note that the use of this control will not change the analog output levels at the rear-panel audio output **1**.

6 Play-Deck Open: Press this button to open the Play Deck 3.

**Record Button:** Press this button to begin the recording process. See pages 19–22 for more information on CD recording.

**3** Synchronous Recording (CD Sync) Button: Press this button once to begin an automated recording of a single track from an external CD player when a digital connection is used. Press it twice to begin automated recording of an entire disc. See page 20 for more information on CD Sync recording.

Dubbing: Press this button to begin the process of making a complete copy of the disc in the Play Deck 3 to a CD-R or CD-RW disc in the Record Deck 15. See page 19 for more information on dubbing.

**Speed:** Press this button to select the recording speed for internal dubs. See page 19 for more information on selecting the proper speed.

**11** Track Increment: Press this button during recording to insert a new track marker at that point in the recording. The current track number will be incremented by one.

**[2] Erase:** Press this button to erase one or more tracks or the entire contents of an unfinalized CD-RW disc. When a CD-RW disc has already been finalized you may erase the entire disc or you may "unfinalize" the disc by erasing the **TOC** data. See page 21 for more information on erasing CD-RW discs.

**(B)** Finalize: Press this button when a recording is complete to initiate the finalization process. The **Play/Select Button 20 (10)** must be pressed within three seconds to activate finalization. Until this button is pressed and the finalization process is complete, CD-R discs may not be played on conventional CD machines. See page 21 for more information on finalization.

 Image: Record-Deck Open:
 Press this button to open the Record Deck IS.

**E** Record Deck: This disc deck is used to record or play back CD, CD-R and CD-RW discs.

**G** Optical Digital Input: This optical digital input may be used to connect a portable digital audio player to the CDR 26 for digital recording. Remove the dust cap before connecting a cable to this jack. Keep the dust cap in a safe place and replace it when the cable is disconnected in order to prevent the possibility of dust getting into the jack and damaging it.

**Toaxial Digital Input:** This coaxial digital input may be used to connect a portable digital audio player to the CDR 26 for digital recording.

**The Analog-Record Level Control:** The control is used to adjust the input level when making recordings from analog sources such as cassettes, or when CDs are recorded in an analog mode. See page 21 for more information on record levels.

**B** Record-Deck Stop: Press this button to stop the CD in the Record Deck.

**20** Record-Deck Play/Select: This button has two functions. It may be pressed when a standard CD is in the Record Deck to put the machine in play, or it may be used to enter a selection or start certain record functions.

**21** Record-Deck Pause: When the Record Deck is in the Play mode, pressing this button will pause the disc. If the disc has previously been paused, pressing this button will restart the playback.

**22** Record-Deck Program Button: Press this button to begin the programming sequence for the Record Deck. See page 18 for more information on programming playlists on the CDR 26.

**23** Record-Deck Next: When a disc is playing in the Record Deck **15**, press and hold this button to play the disc in a fast-forward mode to quickly locate a desired passage. At any time, tapping the button and quickly releasing it will move to the next track on a disc in play.

Record Deck Previous: This button has two functions. When a disc is playing in the Record Deck
press and hold this button to play the disc in a fast reverse mode to quickly locate a desired passage. At any time, tapping the button and quickly releasing it will move to the beginning of the current track, and the next press will move to the previous track. When a

disc is stopped, each press will move back one for programming or play when the disc is stopped. Once a track is entered, it may be played by simply pressing the **Play Button 20**(10).

**25** Input Select: Press this button to select the input source (analog or digital) for recording. See page 20 for more information on input selection.

**26** Record-Deck Time Display Select: Press this button to cycle through the time display options for the Record Deck. See page 17 for more information on the time display.

**27** Information Display: The indicators in the Information Display provide status reports on the operation of the CDR 26. See page 7 for complete explanations of each indicator.

**23 Remote Sensor:** The IR sensor that receives the commands from the remote control is behind this area. Do not cover or obscure this part of the front panel, to avoid any malfunction with the remote.

**Play-Deck Time Display Select:** Press this button to cycle through the time display options for the Play Deck. See page 17 for more information on the time display.

**Continuous Play Button:** Press this button to place the CDR 26 in Continuous Play mode, which causes it to alternate play between the discs in each deck continuously, so long as the next deck to be played contains a disc and play has not been stopped. To return to the default Single Play mode, in which play stops after the disc in the selected deck has played once, press this button again.

**31** Play-Deck Next: When a disc is playing in the Play Deck **3**, press and hold this button to play the disc in a fast-forward mode to quickly locate a desired passage. At any time, tapping the button and quickly releasing it will move to the next track on a disc in play.

**E2 Play-Deck Previous:** This button has two functions. When a disc is playing in the **Play Deck 3**, press and hold this button to play the disc in a fast-reverse mode to quickly locate a desired passage. At any time, tapping the button and quickly releasing it will move to the beginning of the current track, and the next press will move to the previous track. When a disc is stopped, each press will move back one track for programming or play when the disc is stopped. Once a track is entered, it may be played by simply pressing the **Play Button B3(0**.

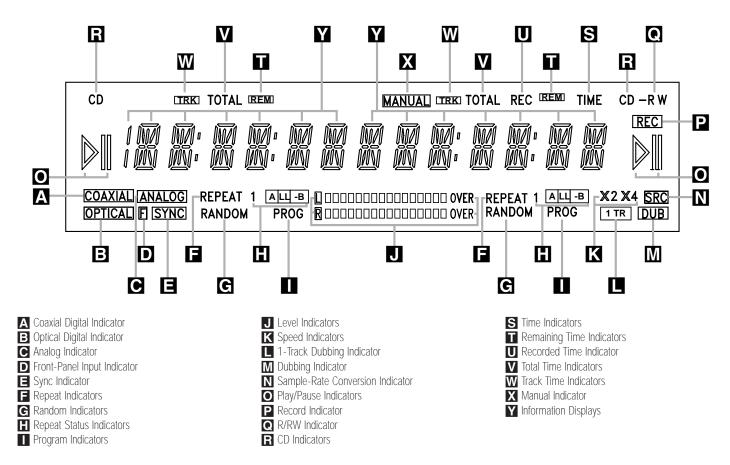
**Bay-Deck Program Button:** Press this button to begin the programming sequence for the Play Deck. See page 18 for more information on programming playlists on the CDR 26.

**32** Play-Deck Pause: When the Play Deck is running, pressing this button will pause the disc. If the disc has previously been paused, pressing this button will restart the playback.

Big Play-Deck Play: Press this button to begin playback of a CD in the Play Deck or the dubbing process.

**G** Play-Deck Stop: Press this button to stop the CD in the Play Deck.

## FRONT-PANEL INFORMATION DISPLAY



Important Note: Since the CDR 26 is a dual-deck player/recorder, there are two separate sets of indicators for the Random, Program, Repeat, Repeat Status, Time, Total Time, Remaining Time and Track Time. In addition, there is a separate Information Display, Play/Pause Indicator and CD Indicator for each deck. As the function of these indicators is identical for both decks, they are described in this manual with a common letter. When the CDR 26 is playing or recording a disc, any indicators that light on the left side of the display describe the status of the Play Deck, while those that light on the right side of the display describe the status of the Record Deck. Depending on the activity of the unit and the settings you select, different indicators may light on the two sides at the same time.

A Coaxial Digital Indicator: This indicator lights when a digital source is being recorded. See page 20 for more information on source selection.

**Doptical Digital Indicator:** This indicator lights when a digital source connected to one of the optical inputs is being recorded. See page 20 for more information on source selection.

**C** Analog Indicator: This indicator lights when an analog source is being recorded. See page 20 for more information on source selection.

D Front-Panel Input Indicator: This indicator lights in conjunction with the Coaxial Digital Indicator A or the Optical Digital Indicator B when either the front-panel coaxial or optical input has been selected. See page 20 for more information on selecting an external source. Sync Indicator: This indicator lights when the unit has been programmed for a CD Sync recording. See page 20 for more information on CD Sync recordings.

**Repeat Indicators:** These indicators light when a repeat function is being used. See page 18 for more information on repeat play.

**C** Random Indicators: These indicators light when random playback has been programmed for one of the CD decks. See page 16 for more information on random play.

Repeat Status Indicators: These indicators display the type of repeat function being used. See page 18 for more information on repeat status.

■ **Program Indicators:** These indicators light when one of the CD decks is being programmed for playback options. See page 18 for more information on programmed play. Level Indicators: These LEDs display the input level during an analog recording, and the output level during playback. See page 21 for more information on record levels.

Speed Indicators: These indicators show which record speed has been selected for dub recordings. See page 19 for more information on record-speed selection.

■ 1-Track Dubbing Indicator: This indicator lights when a single track is being dubbed by itself, as opposed to the entire disc or a programmed playlist. See page 19 for more information on dubbing.

**Dubbing Indicator:** This indicator lights when a dub is in progress between the two CD decks. See page 19 for more information on CD dubbing.

■ Sample-Rate Conversion Indicator: This indicator lights when the Sample-Rate Converter is in use to change the digital sample rate when the incoming signal is not the standard 44.1kHz used by standard CDs. This is an automatic function and does not require any user intervention.

**O** Play/Pause Indicators: These indicators show the status of the individual CD decks. The  $\blacktriangleright$  lights when the CD is playing, and the  $\blacktriangleright$  II lights when the unit is in a Pause mode.

**P** Record Indicator: This indicator lights while the unit is making a recording and flashes during the preparations for recording.

**Q R/RW Indicator:** This indicator shows which type of recordable disc is present in the **Record Deck 15**. When a CD-R disc is present, only the **R** is lit. The **RW** lights when an erasable CD-RW disc is in use.

**R** CD Indicators: These indicators light when a standard CD is playing in either deck **3** or **15**.

S Time Indicators: These indicators light in conjunction with one of the time indicators TUVW to show which of the time status modes is active.

■ Remaining Time Indicators: These indicators light when the Information Display Y shows the time remaining on a disc.

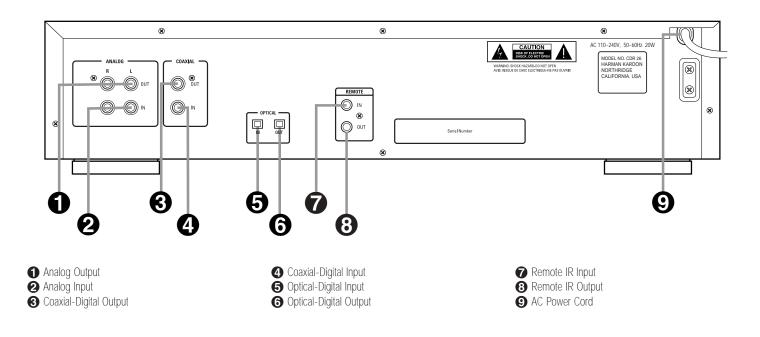
**D** Recorded-Time Indicator: While a recording is in progress, and up until a CD-R or CD-RW disc in the Record Deck **b** has been finalized, this indicator will light, and the Information Display **v** will indicate the total amount of time recorded on the disc thus far.

**V** Total Time Indicators: These indicators light when the Information Display **Y** shows the total time of all tracks on a disc.

W Track Time Indicators: These indicators light when the Information Display Y shows the running time of the individual track being played.

Manual Indicator: This indicator lights when the manual method of incrementing tracks is selected for a recording session. See page 20 for more information on track increments.

☑ Information Displays: These displays serve two functions, showing the time displays for discs playing, and displaying messages about discs or recordings.



• Analog Output: These jacks carry the analog audio output signal from the deck currently playing. Connect them to the Tape Play/In input jacks on a receiver, preamp or processor.

Analog Input: These jacks accept the analog signals that are used for CD recordings. Connect them to the Tape Rec/Play outputs on a receiver, preamp or processor.

 Coaxial-Digital Output: This jack carries the digital-audio output signal from the deck currently playing. Connect it to a coaxial-digital input on a receiver, processor or digital decoder.

Coaxial-Digital Input: This jack accepts the digital-audio input signal from a compatible digital audio product and should be connected directly to a digital player or to a coaxial-digital output on a CD or DVD player or an A/V receiver or processor.

**IMPORTANT NOTE:** The coaxial digital input should only be connected to **digital** input or output jacks. Even though it uses the same RCA-type connector as standard analog audio connections, **DO NOT** connect it to conventional analog input or output jacks.

 Optical-Digital Input: This jack accepts the digital-audio input signal from a compatible digital audio product, and should be connected to the optical-digital output on a CD or DVD player or an A/V receiver or processor. Optical-Digital Output: This jack carries the optical digital output signal from the deck currently playing. Connect it to an optical digital input on a receiver, processor or digital recorder.

Remote IR Input: Connect the output of a remote infrared sensor or the remote control output of another compatible Harman Kardon product to this jack. This will enable the remote control to operate even when the front-panel Remote Sensor 23 is blocked. This jack may also be used with compatible IR remote control-based automation systems.

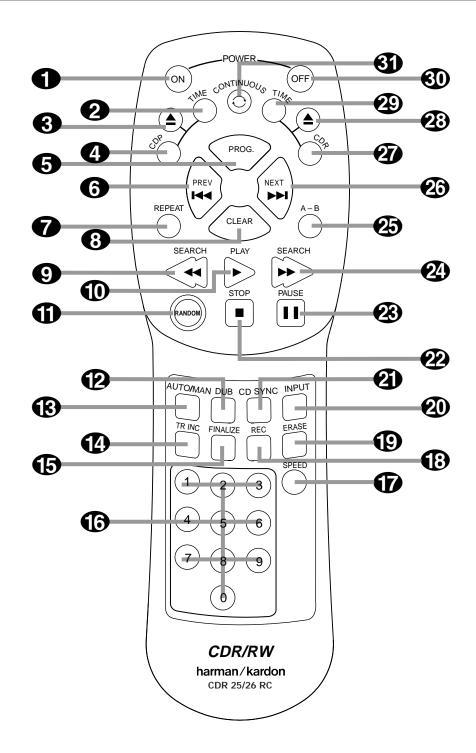
Remote IR Output: Connect this jack to the IR input jack of another compatible Harman Kardon remote-controlled product to have the built-in Remote Sensor 23 on the CDR 26 provide IR signals to other compatible products.

**③** AC Power Cord: Connect this plug to an AC outlet. If the outlet is switch-controlled, make certain that it is in the ON position.

## REMOTE CONTROL FUNCTIONS



IMPORTANT NOTE: Some of the remote's functions, including Play, Pause, Stop, Search, Next and Previous Track, are shared between the two decks. Always remember to press the CDP Select Button ④ to use the remote to control the Play Deck, or press the CDR Select Button ⑦ to control the Record Deck. When you press one of these buttons, an indication of CDP or CDR will appear in the appropriate Information Display ♥.



**1** Power-On Button: Press this button to turn the CDR 26 on. Note that in order for this control to function, the front-panel Power Switch **1** must first be pressed so that the unit is in the Standby mode.

Play Deck (CDP) Time Display Control: Press this button to cycle through the various time display options for the disc in the Play Deck 3. See page 17 for more information on time-display options.

**3** Play Deck (CDP) Open: Press this button to open the Play Deck **3**.

Play Deck (CDP) Select: Press this button to control or program the functions of the disc in the Play Deck 3.

**5 Program:** Press this button to begin the programming sequence for one of the CD decks. See page 18 for more information on programming playlists on the CDR 26.

**6 Previous-Track Skip:** Press this button to skip backwards to the beginning of the track currently being played. Press it a second time to move back to the beginning of each previous track.

**Repeat:** Press this button once to repeat the current track. To repeat an entire disc, press the button twice.

8 Clear: Press this button to clear an item in a program sequence. See page 18 for more information.

**9** Reverse Search: Press this button to play the selected disc in reverse to locate a desired passage.

**D** Play: This button has two functions. It will most often be used as a standard play button, but when setting up certain record functions, it is also used as an Enter or Select button.

**(1) Random Play:** When the CD deck is stopped, press this button to begin random play of all tracks on a disc.

Dub: Press this button to begin a dub. See page 19 for more information on dubbing.

Automatic/Manual Track Increment Selector:
Press this button to select between automatic and
manual track incrementing during a recording session.
See page 20 for more information on track incrementing.

Track Increment: When the Manual mode for track incrementing is selected during recording, press this button to increase the track number. NOTE: This function does not operate during CD Sync or dub recording.

Finalize: Press this button when a recording is complete to initiate the finalization process. The Play/Select Button 20 (1) must be pressed within three seconds to activate finalization. Until this button is pressed and the finalization process is complete, CD-R or CD-RW discs may not be played on conventional CD machines. See page 21 for more information on finalization.

**(D)** Numeric Keys: Press these buttons to access a specific track for playback or during the programming process. See page 18 for more information on programmed playback.

Speed Select: Press this button to select the recording speed for internal dubs. See page 19 for more information on selecting the proper speed.

**(B)** Record Button: Press this button to begin a manual recording.

(D) Erase Button: Press this button to initiate the erasure of a track or of an entire CD-RW disc or to unfinalize a disc. Erasure is only possible on CD-RW discs. See page 21 for more information on erasing discs.

**2D** Input Select: Press this button to select the input source (analog or coaxial- or optical-digital) for recording. See page 20 for more information on input selection.

**CD Sync:** Press this button once to begin an automated recording of a single track from an external CD player when a digital connection is used. Press it twice to begin automated recording of an entire disc. See page 20 for more information on CD Sync recording.

22 Stop: Press this button to stop playback or recording.

**23** Pause: Press this button to momentarily pause playback. Press it again to resume playback.

**23** Forward Search: Press this button to play a disc in fast-forward mode.

A-B Repeat: Press this button to specify a segment of a disc for repeat play. See page 18 for more information on repeat play.

**26** Next Track/Skip: Press this button to skip forward to the next track on a disc.

Record Deck (CDR) Select: Press this button to control or program the functions of the disc in the Record Deck 15.

Record Deck (CDR) Open: Press this button to open the Record Deck **15**.

Record Deck (CDR) Time Display Control: Press this button to cycle through the various time-display options for the disc in the **Record Deck** . See page 17 for more information on time-display options.

**Over Off:** Press this button to place the unit in a Standby mode.

GO Continuous Play Button: Press this button to place the CDR 26 in the Continuous Play mode. In that mode, the unit will play all tracks on the disc in one tray, switch to the second tray and play all tracks, and then continuously alternate between the two discs until the unit is stopped or the button is pressed again to return to the Single Play mode. **Important Note:** To prevent possible damage to your speakers or other components in your audio system, we strongly recommend that ALL system components, including the CDR 26, be turned off and unplugged from their AC power source when any connections are made or a new component is installed.

#### Placement of the CDR 26

Since the CD transports in the CDR 26 are precision instruments, they are subject to interference from vibration. To minimize the possibility of skipping during playback or recording, it is recommended that the unit be placed on a level, solid, vibration-free surface.

When installing the CDR 26 in a cabinet or tight space, always make certain that there is enough room in front of the unit for the disc drawers to open fully, and that there is enough space above the unit so that discs may easily be inserted in the disc drawers.

In addition to the safety considerations outlined on page 4, it is also recommended that the CDR 26 not be placed in a location that is subject to direct sunlight or extreme heat or cold, as these conditions may damage the discs used in the player, or the player itself. Note that audio amplifiers or high-power receivers, as well as certain other electronic products, may generate significant heat. For that reason, do not place the CDR 26 directly on top of an amplifier, receiver or other heat source. Always allow at least one inch of free space on all sides of the CDR 26, as well as other electronic products, to allow for proper ventilation.

The unit should also be kept away from sources of water or damp conditions.

#### Connections to Your Audio System

When connecting the CDR 26, think of the process as if you were connecting a standard tape or cassette recorder, with the addition of the digital connections.

Depending on the capabilities of your receiver, preamp or processor, you may find it convenient to connect the analog inputs and outputs to the jacks marked for a tape recorder. As the CDR 26's functions resemble those of a standard tape recorder, this may make it easier to select it as an input on your receiver or preamp. Connect the **Analog Output Jacks 1** to the Play/In jacks of a Tape or Aux input on your receiver or preamp. Connect the **Analog Input Jacks 2** to the Tape Rec/Out jacks on your receiver or preamp. To play the output through the digital decoder in your receiver or an external processor, connect the **Coaxial-Digital Output Jack ③** or the **Optical-Digital Output Jack ③** to the matching digital-input jack on your receiver or processor. You may have to change a setting on the receiver or processor to link the digital input to the "Tape" button or the specific input selector associated with the digital inputs. Consult the owner's manual on your receiver or processor for details, as this configuration may vary from unit to unit.

To make recordings from external digital sources, such as a CD, DVD or MD player, connect the **Coaxial-Digital Input Jacks 17 (2)** or **Optical-Digital Input Jacks 16 (5)** on the CDR 26 to the digital output jacks on your receiver or processor. If your receiver does not have digital-output jacks, you may connect the **Coaxial-Digital Input Jacks 17 (4)** or **Optical-Digital Input Jacks 16 (5)** on the CDR 26 directly to the digital outputs on your CD player or other digital device.

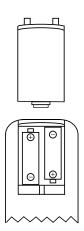
Connections to a portable digital CD or MD player may also be made by connecting the Coax or Optical Digital Output of the player to one of the front-panel **Digital Inputs 1617** on the CDR 26.

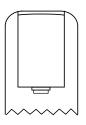
#### IMPORTANT NOTE ON DIGITAL CONNECTIONS:

Although digital-coax connections use the same type of "RCA" phono jack as standard analog signals, please take special care to connect digital signals only to digital jacks. In many cases, the digital jacks may be identified by an orange-colored insert ring around the center of the jack. When making digital connections, be sure to use coax-interconnect cables, such as the one supplied with the CDR 26 or cables intended for video applications. Even though they have the correct type of RCA connector, do not use audio-interconnect cables that have twisted-pair construction, as they are not appropriate for digital signal use. If you have any questions about the type of cables to use with the CDR 26, consult your dealer.

#### Batteries

Insert the two AA batteries supplied with the CDR 26's remote by turning the remote over so that the bottom of the remote is facing towards you. Gently lift the plastic tab on the battery cover up and away from you, and lift the lid off. Insert the batteries in the remote, being careful to follow the + and – polarity indications in the bottom of the compartment. Replace the cover by first seating the two small tabs into the mating holes at the top of the remote, and then gently push the cover down until the latch snaps into place with an audible click.





**NOTE:** When replacing batteries, it is always a good idea to replace both at the same time. When the remote will not be used for an extended period of time, it is also a good idea to remove the batteries to avoid the possibility of damage due to corrosion. Batteries contain chemical substances and we recommend that you dispose of them properly and in compliance with any local regulations.

#### IR Remote Connections

If the CDR 26 is installed behind a cabinet or other obstruction that may block the path between the frontpanel **Remote Sensor** 23 and the location where you will use the remote, an optional external IR sensor may be used. Connect the sensor to the **Remote IR** In Jack ⑦ on the rear panel. This jack may also be connected to the IR Output jack of another compatible Harman Kardon component or a compatible IR system remote product.

You may also use the IR sensor in the CDR 26 to send commands to other compatible remote products. Connect the **Remote IR Out Jack (3)** to the input of the other product or system.

#### **Power Connections**

Connect the **AC Power Cord** (9) to an AC power source. The CDR 26 uses sensitive, high-performance computer-grade CD drives, and to protect them we recommend that you consider the use of a surge protector, just as you would for a computer.

If the rear-panel AC outlet on a receiver or other product is used, make certain that the total power of all products connected does not exceed the maximum rated output of the product containing the outlets. If the CDR 26 is connected to a switched outlet, remember to turn on the outlet or product controlling it in order for the CDR 26 to operate.

## CD RECORDING BASICS

CD recorders (CDRs) are similar to standard CD players, with the addition of the features and controls needed for recording. Functions such as play, search and programming for playback will be familiar, but the recorder will function slightly differently from what you may be used to for magnetic tape recorders.

#### Disc Types

Unlike a conventional CD player, the CDR 26 uses three types of discs, and it is important to understand how each one plays.

Both decks in the CDR 26 will play back any conventional CD that bears this logo.



Recordable Discs that bear this logo (called CD-R Audio discs) may be recorded on once, and when they are finalized they will play in either deck in the CDR 26 or in any conventional CD player, including home, car and portable models. CD-R discs will not play in most DVD players, unless the DVD player has been specifically designed to play the CD-R format. Consult the owner's manual for your DVD player for further information. The Record Deck 15 on the CDR 26 may also be used to record on these discs, and it will play CD-R Audio discs even if they have not been finalized.

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Rewritable Discs that bear this logo (called CD-RW Audio discs) may be used for recording on the CDR 26, and they may also be erased and reused. They may be recorded on or played in the Record Deck 15 of the CDR 26 and in other CD-RW recorders or CD-RW-compatible players. They will NOT play back in many current CD players unless the player is CD-RW-compatible. CD-RW Audio discs will play on most DVD players once they have been finalized.

NOTE: To avoid confusion between recordable discs that are formatted for use with consumer CD recorders such as the CDR 26 and standard CD-R/ RW discs that are meant only for use in computers, some manufacturers or retailers will add a "For Music Use" icon to their discs. However, to be assured of complete compatibility with the CDR 26, always look for the words "DIGITAL AUDIO" in the compact disc logo when purchasing blank discs for use with your CDR 26.

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Discs designed for use in computer CD-R drives may not be used for recording in the CDR 26. Only discs specifically designed for use in consumer CD audio recorders may be used. If you attempt to use a blank-computer-type recordable disc for recording on the CDR 26 you will see a NO AUDIO message in the Information Display and recording will not be possible. However, discs that have been recorded on in the CD-R drive of a computer may be played in the CDR 26, provided that they have been properly finalized in accordance with audio standard IEC958.

The CDR 26 is specifically designed for the recording and playback of consumer audio discs, and cannot be used to copy data discs, DVDs or other optical discs used by video game systems.

#### CD-R Terminology and Display Messages

Compact disc recording has its own special terminology, and some of the messages displayed by the CDR 26 may be new to you. Before using the CDR 26, you may wish to familiarize yourself with some of the terms used by the CDR 26. Additional error message displays may also appear. Please see page 23 for a complete explanation of error messages.

Finalize: This term refers to the process that completes the recording of a disc by recording a final Table of Contents and preparing the disc so that it may be played on other machines. A CD-R disc may not be played on other CD players until it is finalized. However, once the finalization process is complete, a CD-R disc may not be recorded on again. Only CD-RW discs may be "unfinalized", so that additional tracks may be recorded on a disc.

**TOC**: This stands for Table of Contents and refers to the data recorded on each CD that tells the player how many tracks are on the disc, the total time of the disc and the running time of each individual track. Each time a disc of any sort is placed in the CDR 26, you will see **TOC** in that deck's Information **Display** Y to indicate that the unit is reading this data from the disc. This is required to copy the track information to any recording.

**OPC**: Stands for Optical Processing Calibration. When you see this message in the Information Display Y for the Record Deck 15, it means that the laser transport inside the unit is making the calibrations and adjustments needed so that the recording process is optimized for the specific disc in use.

**BUSY**: When you see this message, it means that the Record Deck is completing part of the record operation. When you see this message, do not press any buttons; simply wait until the message clears from the display. If the CDR 26 is powered off while the **BUSY** message is displayed, e.g., if a power outage occurs, the disc may be rendered unusable because the CDR 26 did not complete the process of updating the disc with track information.

**DISC** FULL: When there are only four seconds of record time remaining on a blank disc, a DISC FULL message will appear in the Information Display Y. When you see this message, you will need to stop the recording process and, when a CD-R is being recorded, insert a new blank disc or, when a CD-RW is in use, either use a new disc or erase existing tracks following the instructions on page 21.

Playback of CDs on the CDR 26 resembles that on traditional CD players with a few exceptions to accommodate the availability of two separate playback decks. Before using the CDR 26, power-up the unit by pressing in the **Main Power Switch 1**. The **Status Mode Indicator 2** will turn green, indicating that the unit is on and functioning. At the same time, the **Information Display 27** will light and the legends behind the front-panel controls will also light up.

Once the Main Power Switch 1 has been turned on, the CDR 26 may be powered-on or -off using the remote control. Pressing the Power Off Button 3 on the remote will place the unit in a Standby mode, as indicated by the amber color of the Status Mode Indicator 2. To turn the unit on using the remote, simply press the Power On Button 1.

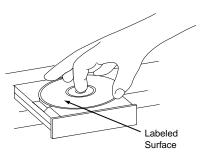
When the unit is in the Standby mode, it still draws power from the AC main outlets. To turn the unit completely off, press the Main Power Switch 1. When the Status Mode Indicator 2 goes out, the CDR 26 is off and not drawing any power. When you will not be using the unit for an extended period of time, we recommend using the Main Power Switch 1 to turn the unit completely off.

Although compact discs are very reliable, rough handling may damage them. Avoid scratching the bottom (nonprinted) side of the discs, as this will affect playback of standard CDs and interfere with the recording of CD-R and CD-RW discs. It is also a good idea to always handle discs by their edges to avoid fingerprints which may also interfere with playback quality and possibly cause damage to the laser and lens assembly.

#### Loading and Unloading Discs

To load a disc, first open the desired CD deck by pressing the appropriate **Open/Close Button 614 ③ ④**. The word **OPEN** will appear in the **Information Display ¥**. Always make certain that there is sufficient room in front of the unit for the disc drawers to open. If either disc drawer is blocked, the drawer will stop at the blocked position and an **ERROR** message will appear. Press the appropriate **Open/Close Button 614 ③ ④** to reopen the drawer.

Load a disc in the tray with the printed (label) side facing up. Once the disc is seated, make certain that it is properly centered within the tray. When using 3" discs, take extra care to make certain that the disc is carefully centered within the smaller ridges in the disc tray.



To close the drawer, press the appropriate Open/ Close Button 614 3 23 or gently press on the outside of the front cover of the disc tray. When the drawer is closed the word CLOSE will appear momentarily in the Information Display Y, and the letters TOC will begin to flash in the display once the drawer is completely closed.

If the disc is a standard CD or a finalized CD-R or CD-RW disc, **TOC** will flash while the unit reads the disc's Table of Contents information. Once that data is read, the **Information Display W** will show the total number of tracks and the total time of all tracks on the disc. The **CD Indicator R** will also light to indicate that a standard CD is in use.

When an unfinalized CD-R or CD-RW disc is placed in the **Record Deck [5]**, the letters **OPC** will flash once the Table of Contents has been read. This indicates that the unit is optimizing its circuits for maximum compatibility with the specific recordable disc in use. The number and total running time of any tracks that have already been recorded will appear in the **Information Display [1]**, and the appropriate indicator **(2)** will light to tell you whether a CD-R or CD-RW disc is in use.

If a computer data disc is placed in the CDR 26, a **DATA DISC** or **DISC ERROR** message will appear, depending on whether the data disc is finalized or not. Data discs will not play and may not be recorded or dubbed in the CDR 26.

#### Using the Remote

The CDR 26's infrared remote control is designed to operate both CD decks, as well as control the playback programming and record functions. To allow for efficient use of the remote, its operation is different from standard CD players. Some buttons are dedicated to one specific CD deck, while others are shared between the two decks.

No matter which deck is playing, the Play Deck (CDP) and Record Deck (CDR) Time Display Control (2) (2) and Open/Close Buttons (3) 28 will always send a command to their respective deck. The other transport and programming functions, however, are shared. To use any of the transport controls, such as Play (1), Stop (22), Pause 23 or the Search and Skip Buttons 6 9 24 26, the Numeric Keys (6) or the Programming Keys **578 1 25**, first press either the CDP Button ④ to command the Play Deck 3 or the CDR Button 27 to command the Record Deck 15. When the button is pressed, a message reading **CDP** or **CDR** will appear in the appropriate Information Display Y to confirm the selection.

To switch the remote from controlling one deck to controlling the other, simply press the **Select Button (4) (27)** for the deck you wish to control at any time.

Features relating to the recording process, such as Speed and the double row of record-function buttons in the center of the remote 2 3 4 5 (3 9 20 2), are dedicated feature buttons that do not require any special selection.

#### Normal Play

To play a disc, first make certain that the unit is properly installed. Turn the CDR 26 on by pressing the **Power Switch** 1 on the front panel or the **Power On Button** 1 on the remote and note that the front-panel display will light.

Insert a disc following the instructions shown on the previous page. To start the playback, press the Play button on the front panel for the appropriate deck 20 35 or press the Select button on the remote for the desired deck ④ ② and then press the Play Button ① on the remote. The Play/Pause Indicator ② will show a right-pointing triangle ▶ and the Information Display Y will show the track number being played and the running time of the track. As each new track begins to play, the track time will reset to □□:□□ and begin to count up for the new track.

NOTE: Remember that unfinalized CD-R or CD-RW discs will only play in the **Record Deck 15**. If you attempt to play an unfinalized disc in the **Play Deck 3**, a **DISCERROR** message will appear to remind you to play the disc in the other deck.

To go directly to a specific track on a disc, enter the track number using the **Numeric Keys (b**). When selecting a two-digit track number, the second digit must be entered within three seconds after the first Numeric Key is pressed.

To momentarily stop the disc at any time, press the **Pause Button 21 34 23**. When a disc is paused, the **Play/Pause Indicator O** will add two vertical lines to indicate a paused disc. Press either the **Play Button 20 35 10** or the **Pause Button 21 34 23** to resume playback at the point where the disc was paused.

In normal operation, the CDR 26 will automatically stop when all tracks on the selected disc have played through. To stop playback at any time, press the **Stop Button 19 36 20** for the deck in use. At the end of a listening session, remove the discs from the decks by following the instructions shown on the previous page. Do not leave the disc drawers open when the unit is not in use to prevent dust and dirt from entering the unit and to prevent damage to the disc-drawer tray.

To place the unit in the Standby mode at the end of a listening session, press the **Power Off Button** (30). The word **OFF** will appear briefly in the **Information Display** (1), any open disc trays will automatically close, and the **Status Mode Indicator** (2) will turn amber.

#### Random Play

To play all of the tracks on a disc in random order, press the **Select Button (4) (27)** for the desired deck, and then press the **Random Play Button (1)**. The **Random Indicator (C)** will light and each track will be played in random order until all tracks on the disc have been played.

#### Search

You may quickly scan through the contents of a disc while listening to the playback at high speed in forward or reverse. To move forward through a disc, press the **Forward Search Button 23** on the remote or press and hold the **Next Button 23 51** on the front panel that is appropriate for the deck in use. To move backward through a disc, press the **Reverse Search Button 9** on the remote, or press and hold the **Previous Button 23 32** on the front panel that is appropriate for the deck in use. When using the remote, always remember to make certain that you have selected the deck you wish to control by pressing the appropriate selector button **4 27** before entering the desired remote command.

#### Track Skip

To move from one track on a disc directly to another, enter the number for the desired track with the **Numeric Keys (b)**. The disc will pause briefly to locate the track, and then immediately play it. When entering a two-digit track number, the second digit must be entered within three seconds of the first digit. To move to the next track on a disc by cycling through the individual tracks, press the **Next Button** (2) on the remote, or the appropriate front-panel **Next Button** [2][3] for the deck in use. Additional presses of the button will move forward through the tracks on the disc.

When a disc is playing, press the **Previous Button** 2432 6 to return to the beginning of the track being played. Additional presses of the Previous button will move backwards through the tracks on the disc.

When a disc is stopped, you may press the Next or Previous button to locate a specific track that you wish to play. When the desired track number appears at the left side of the appropriate **Information Display**, press the **Play Button** 2033 (1) to hear that track.

#### **Continuous Play**

Since the CDR 26 has more than one CD deck, you may play a disc in either drawer. In normal operation, the selected disc will be played once, then play will stop automatically.

However, you may also use the Continuous Play mode to use the CDR 26 for extended play by playing through all the tracks on the disc in one tray, automatically switching to the disc in the second tray, and then continuously playing each disc in sequence until the **Stop Button 1986 20** is pressed.

To initiate continuous play, first press the **Continuous Play Button 30 31**, and the **Information Display 27** will show the current state of the mode. If the readout displays **CONTINUE OFF** press the **Continuous Play Button 30 31** again so that the message changes to **CONTINUE ON**. Next, press the front-panel **Play Button 20 35** for the deck that you wish to play first, or press the CDP **Select 4** or CDR **Select 27** on the remote and then press the **Play Button 10**.

Continuous playback may be stopped at any time by pressing the **Stop Button 19 36 29**. To cancel continuous play after the current disc is finished playing, press the **Continuous Play Button 30 31** twice so that **CONTINUE OFF** appears in the **Information Display 27**.

#### Time Display

The CDR 26's time display is capable of showing a wide range of information about the contents of a CD.

Once the disc's Table of Contents, or TOC, data has been read, the **Information Display Y** for any deck that has a CD inside will show the number of tracks on the disc in the two left digits of the display, and the total running time of the disc. When the disc is playing, the tracks will count up as each new track is reached, and time display will show the elapsed time for the track being played.

To view the time remaining in the track being played, press the **Time Display Control Button 2629 (2) (2)** for the deck in use so that the **Remaining Time Indicators (S) (1)** light. The **Information Display (2)** will count down the time remaining in the track, and at the start of the next track the counter will start to count down the running time of that track.

To view the total time remaining on the disc, press the **Time Display Control Button 26 29 2 29** for the deck in use so that the **Total Time Indicators SIV** light. The **Information Display Y** will show the total time remaining for all tracks on the disc and count down until the disc has finished playing. When the disc has played all the way through, the total number of tracks and the total running time of the disc will be displayed.

#### Headphone Listening

You may listen to the output of the CDR 26 through headphones at any time by simply plugging the headphones into the front-panel **Headphone Jack 4**. The volume of the headphone output may be adjusted with the **Headphone Level Control 5**. Changes to the headphone level will not alter the output settings to the analog outputs. Those levels are fixed, and the volume should be adjusted using your receiver, preamp or processor. The CDR 26's advanced programming system enables you to program the order in which tracks are played, to repeat one track or all tracks, or to repeat any segment of a disc without regard to track numbers.

#### **Programming Playlists**

To program the order of playback for the tracks on a disc, insert the disc, let the unit read the Table of Contents information, and wait until the disc has stopped and the number of tracks and total running time is displayed. Next, select the deck that will be programmed by pressing the CDP Select Button (4) on the remote for the Play Deck (3) or the CDR Select Button (27) on the remote for the Record Deck (15).

To begin the programming sequence, press the **Program Button (5)** on the remote or the **Program Button (22) (33)** for the appropriate deck on the front panel. The **PROG Indicator (1)** will light and the **Information Display (1)** will show **(1) (1) (1) (1)**.

Next, enter the track numbers to be played by pressing the Numeric Keys (). For two-digit track numbers, be certain to enter the second digit within three seconds after the first number is entered. If you are programming your playlist using the front-panel controls, use the Previous and Next Track Buttons 23 24 31 32 to locate the desired track, then press the Program Button **2233** for the appropriate deck to enter the track into the sequence. As each track is entered, the display will blink three times, alternating between two displays. The first display will show the track number just entered on the left side of the Information Display Y under the Track Time Indicator  $\mathbf{W}$ , while the right side will flash the number of steps that have been programmed. For example, after programming the first step to be track number 3, the display will flash **D3 P - D1**.

If you make a mistake while programming a track, you may press the **Clear Button** (3) to delete the last programmed track.

Alternating with the track number and program step will be a display of the track and the total running time of all tracks that have been programmed so far. For example, a display of **Db J1 : 25** will indicate that track number six was the last track programmed, and that the total time of all tracks so far is 11 minutes and 25 seconds. The **Total Time Indicators SV** will flash with this display to remind you of the display's contents. These displays will alternate three times, and then show a steady display of the total time and last track programmed.

Continue to add tracks in the order you wish to have them played until the programming session is complete. You may add up to 20 tracks, repeating a track if desired, as long as the total number does not exceed 20. If you exceed the 20-track limit, the display will read **FULL**. Tracks may also be added using the **Next** [23][3][2] and **Previous Buttons** [24][32][6] to locate the track, and the **Program Button**[6] to enter that track to the programmed sequence.

When the complete list of tracks has been entered, press the **Play Button 2035 (1)**. The tracks will then play in the order they have been entered. Note that a programmed list of tracks may also be recorded if the disc being programmed is in the **Play Deck 3**. Follow the instructions on page 20 for complete information on recording and dubbing.

Once you have programmed a playlist it will remain in the unit's memory until the disc is removed or the unit is turned off. Thus, if you play through a programmed list, simply press the **Play Button 20 35 (1)** again to replay the list.

To cancel an entire program list while the program is playing, press the **Program Button 2233** and note that the **Program Indicator** will go out. To remove a total program list when the disc is stopped, simply open and close the disc drawer. Whenever a disc is removed or the unit is turned off, the program list is erased.

#### **Repeat Play**

The CDR 26's programming system enables you to repeat a single track on a disc, the entire disc or a specially programmed passage that you select. To repeat all discs, use the Continuous Play mode and press the **Stop Button 1936 29** after the desired number of repetitions has played. (See page 17 for more information on the Continuous Play mode.)

#### Repeat One Track

To repeat the track you are currently listening to, press the **Repeat Button** and note that the **Repeat Indicator** and the **Repeat Status Indicator** will both light to display **Repeat 1**. If the track is changed by using the **Next/Previous Skip Button 23**[24]**31**[32] **3 23** while the **Repeat 1** mode is active, the new track will now be repeated. Once Repeat 1 playback has been started, it will continue until the unit is stopped by pressing the **Stop Button** [9] **36 29**, or the disc deck is opened by pressing the appropriate **Open/Close Button 6 14 3 23**. When playback is stopped, the Repeat sequence is erased and must be reentered if you wish to repeat a track on another disc.

#### Repeat All Tracks

To repeat all the tracks on a disc in order, press the **Repeat Button** twice while the disc is playing and note that the **Repeat Indicator** and the **ALL Repeat Status Indicator** will light. Once the **Play Button** 2035 (1) is pressed, the disc will play through from beginning to end continuously, until the **Stop Button** 1936 (2) is pressed. The Repeat All function may be cancelled at any time by pressing the **Repeat Button** (2) once until both the **Repeat Indicator** (2) once until both the **Repeat Indicator** (2) once until both the **Repeat Indicator** (3) once until both the **Repeat Indicator** (4) once until both the **Repeat Indicator** (5) once until both the **Repeat Indicator** (4) once until both the **Repeat Indicator** (4) once until both the **Repeat Indicator** (5) once until both the **Repeat Indicator** (6) once until both the **Repeat Indicator** (7) once until both the **Repeat Indicator** (6) once until both the **Repeat Indicator** (6) once until both the **Repeat Indicator** (6) once until both the **Repeat Indicator** (7) once until both the **Repeat Indicator** (6) once until both the **Repeat Indicator** (6) once until both the **Repeat Indicator** (7) once until both the **Repeat Indicator** (8) once until both the **Repeat Indicator** (8) once until both the **R** 

#### Repeat A-B

The CDR 26 may be programmed to repeat any section within a track, or a complete passage that includes material from a series of consecutive tracks.

To program the unit for A-B Repeat play, first play the disc and locate the point where you wish to begin the repeated section. At the start point, press the A-B Repeat Button (2) and note that the Repeat Indicator **•** will light and the Repeat Status Indicator **•** will show an A and flash. Let the disc play until the point at which the section to be repeated will end. At that end point, press the A-B Repeat Button (2) again and note that the Repeat Status Indicator **•** will stop flashing and will light, showing REPEAT A-B.

The unit will immediately begin to play the section you have programmed, and continually repeat it.

To resume normal play, press the **A-B Repeat Button 25**. The **Repeat A-B Indicators H** will go out, and the disc will continue playing through to the end. Stopping the disc or opening the disc drawer will automatically cancel the Repeat A-B programming. Making recordings on the CDR 26 is simple and easy once you become accustomed to the basics of CD recording. Before making your first recording, please take a moment to review the CD Recording Basics on page 14. In particular, you will need to become familiar with the types of discs that may or may not be used in the CDR 26. In addition, some terms used in the following pages may be new to you. The following definitions and information will help you to make CD recordings using the CDR 26's many features:

- The CDR 26 accepts analog inputs and digital coax or optical inputs. Before making a recording, be certain that you have selected the correct input. (See page 20.)
- After a disc is recorded, it must be finalized. This process adds Table of Contents data to the disc and makes it playable on other machines. Until a disc is properly finalized, it may not be played on standard CD players or in the Play Deck 3 of the CDR 26. (See page 21.)
- The CDR 26 may record on either CD-R or CD-RW discs, but they must be of the type specifically designed for use in consumer-audio CD recorders. These discs may be recognized by looking for the words "Digital Audio" in the compact disc logo on the blank disc or its packaging. Discs with the logo reading only "Compact Disc/Recordable" are designed for computer data recording, and they will NOT work in the CDR 26. (See page 14.)
- CD-R discs may not be erased or have material added to them once they have been finalized.
- At least four seconds of blank recording time must remain on an unfinalized disc for recording to take place.
- The maximum number of tracks that may be recorded on a disc is 99.
- Some CD-R/CD-RW audio recording discs may be used for single-speed recordings only. If you use a disc with such a warning, make certain not to make a dub at x2 or x4 speed. However, the CDR 26 has been tested for compatibility with a wide range of blank discs from manufacturers throughout the world. In most cases, blank discs will produce highquality recordings at any dub speed.
- In some rare cases, a CD player may not be compatible with CD-R discs. If you find that a CD-R disc plays in some players but not in others, the fault is most likely with the player, not with the recorded disc or the CDR 26. Remember that CD-RW discs made in the CDR 26 will play only in CD players that are specially designed to accommodate CD-RW discs. Most DVD players are compatible with finalized CD-RW discs.

- Some commercial CD discs may contain a copyprotection data bit that will prevent a digital copy of the disc to be dubbed. In that case, the CDR 26 will attempt to make an analog dub.
- This product is equipped with the Serial Copy Management System (SCMS) to protect the rights of copyright owners. Although it is possible to make a copy of most CDs for your own personal use, it is not possible to make a digital copy from another digital copy, but it is possible to make an analog copy of a digital copy.

RECORDINGS MAY BE MADE FOR PERSONAL USE ONLY. ANY UNAUTHO-RIZED COPYING IS SUBJECT TO THE APPLICABLE LAW.

 The CDR 26 will not copy DVD discs, computer-data discs, CD-based computer or video game discs, or digital audio discs with a sample rate that is not compatible with the range of the CDR 26's samplerate converter.

Recordings on the CDR 26 may be made in a number of ways:

- Discs or single tracks may be dubbed using the playback deck on the CDR 26 as a source. These copies may be made in real time, at twice normal speed, or at four times normal playback speed.
- Recordings may be made from an external CD player or other digital source that is synchronized with the dub being made in the CDR 26.
- Recordings may be made from any compatible external digital source.
- Recordings may be made from an external analog source.
- You may record a compilation or mix of tracks from one or more CDs by dubbing from the CDR 26's playback deck.

**NOTE:** CD-RW discs may not be erased and reused more than 99 times. This is a limitation of the CD-RW format, not a fault of the CDR 26.

#### **Disc Dubbing**

The easiest way to make a copy of an entire disc is to use the CDR 26's internal dub capability.

**Step One:** Insert a blank or unformatted disc in the **Record Drawer ID**. When the disc is inserted, the CDR 26 will examine it to determine whether it is a CD-R or CD-RW disc, and optimize itself for the best possible recording. This is indicated by an **OPC** message in the **Information Display Y**.

**Step Two:** Place the disc to be dubbed in the **Play Deck 3** and wait until the Table of Contents data is read and the **Information Display Y** shows the track and running time data for the disc. Step Three: Select a dub speed. The default speed is a real-time dub, where the recording takes as long as the actual running time of the disc. However, with the CDR 26 you may also select x2 dubbing or x4 dubbing. Press the Speed Button 10 € to select a speed as indicated by the x2/x4 Indicators . When no Speed Indicator lights, the unit is set to real-time recording. The slower the record-dub speed, the more tolerant the unit is of errors on the blank disc. However, with most high-quality blank discs, the x2 and x4 speeds should not present a problem.

Step Four: Make certain that there is sufficient blank space on the record disc. To do this, first determine the time available on the blank disc by subtracting the time of previously recorded material, if any, that is shown in the record-side Information Display ♥ from the total time available on the disc. That number should be greater than the total time of the disc to be dubbed, which is shown in the play-side Information Display ♥.

Step Five: When you are ready to start the dub, press the Dubbing Button (2). During this process the Dubbing Indicator (1) will light, the Record Indicator (2) will flash and a BUSY message will flash in the record deck's Information Display (2).

Step Six: When both Information Display indicators return to normal, with indications of D1 D0:D0, press the Play/Select Button 2035 (1) to start the dub.

While the dub is in progress, you will see the track numbers and running time increase as the disc is copied. The Level Indicators will also flash but this is only for your reference, as record levels may not be adjusted during digital recordings. It is possible to listen to the source disc while it is being dubbed by selecting the appropriate input on your receiver, preamp or processor.

**Important Note:** When a high-speed (x2 or x4) dub is being made, you will hear the playback from the outputs **136** at the faster speed. Fast-speed playback increases the pitch of a sound, and when played back at high volume levels this may damage your speakers. DO NOT use high volume levels when listening to high-speed dubs while they are in progress.

The dub will stop automatically when the source disc has played through to the end. If you are adding additional tracks to a disc that has not yet been finalized, **UPDATE** will flash in the **Information Display M**. After the dub is finished, the CDR 26 will return to normal operation. To manually stop a dubbing operation, press the **Stop Button [2] 33 (22)** for either deck. DO NOT turn off power without first stopping the recording. An intentional or inadvertent loss of power may render the recording disc permanently unusable because the CDR 26 will not have had an opportunity to update the disc with the track information.

**Step Seven:** As with all recorded CD-R/CD-RW discs, the disc must be finalized before it can be played in other machines. See page 21 for instructions on disc finalization.

#### Notes on Dubbing:

· To dub just a single track: After you have inserted the source disc into the Play Deck Drawer 3, use the Previous or Next Buttons 31 32 6 26 to select the desired track. (When using the remote, remember to first select the play deck by pressing the Play Deck (CDP) Select Button (4).) You may then select a dub speed, and press the Dubbing Button 9 (2) followed by the Play/ Select Buttons 20 35 (1) to make the dub. To dub a compilation of tracks from one or more CDs: Create a programmed playlist before pressing the Play/Select Button 2035 (1) to start the dub. Instructions for creating a program list may be found on page 18. If you will be combining tracks from more than one CD, keep in mind that you may only dub tracks from one CD at a time, although you may switch source CDs as many times as needed, so long as the total time does not exceed the recording time available on the disc in the Record Deck 15.

**NOTE:** Dubs containing program lists may be made at either the x1 or x2 speed. If you attempt to make a programmed dub at the x4 speed, the unit will automatically select the x2 speed.

- The Pause buttons do not operate while a dub is in progress.
- Tracks will be added automatically to mirror the track structure of the original disc.
- The Total Time indication of the recorded CD may vary slightly from the original due to variations in the spin speed of each drive, but this is normal. No information has been lost in the recording process.
- If the original disc being dubbed is a digital copy or if it contains copy-prohibit signals, the unit will auto-matically make an analog copy.

#### **CD Sync Recording**

CD Sync (Synchronous) recording allows you to make an automatic digital recording from an external CD player or MiniDisc (MD) player. During CD Sync recording, the recording starts as soon as the CDR 26 detects that the source has started play, and tracks are added automatically. To make a CD Sync recording:

**Step One:** Make certain your playback source is selected and cued to the correct starting point.

#### Step Two:

Selecting a Digital Input Select the appropriate digital input by pressing the Input Select Button 25 20 until the desired COAXIAL FRONT, COAXIAL REAR, OPTICAL FRONT or OPTICAL REAR indication appears in the Information Display 27 and the appropriate Digital Indicator AB lights. When one of the Front-Panel Digital Inputs 1617 has been selected, the Front-Panel Input Indicator D will also light. CD Sync recordings may not be made from an analog input.

**Step Three:** Make certain that there is a fresh disc in the record drawer for the recording.

Step Four: Select the type of recording to be made:

- To record only the first track from the source player, press the CD Sync Button (3) (2) once so that
   TRK appears in the record deck's Information Display (2).
- To record the entire disc or tape, press the CD Sync Button (3) (2) twice so that ALL appears in the record deck's Information Display (2).

## The Sync Indicator **E** will light and the **Record Indicator P** will flash.

When the desired mode has been selected, start the playback from the source machine. The CDR 26 will automatically recognize the incoming digital data and begin recording. If the source material is a CD, the track numbering from the original disc will be carried over to the dub. If the playback source is NOT a CD, you will have to increment the tracks manually (see below).

The recording will continue until the CDR 26 senses that the playback is finished when there is no incoming signal for more than three seconds. At that point the recording will stop. You may also stop the recording at any time by pressing the **Record Deck Stop Button 19 (2)**. When there are only four seconds remaining on a blank disc, the **DISC FULL** message will appear in the **Information Display (2)**. When you see this message, you will need to stop the recording process and, when a CD-R is being recorded, insert a new blank disc or erase existing tracks following the instructions on page 21.

**Step Five:** After the recording is complete, the unit will return to normal operation. Remember to finalize the recorded disc so that it may be used in other machines (see page 21).

#### Recording From an External Source

To record from an external source:

Step One: Place a CD-R or CD-RW audio disc in the Record Deck [5].

#### Step Two:

Selecting a Digital or Analog Input Select the input to be used by pressing the Input Select Button 25 (20). Pressing the button will cycle between the input choices, which will be shown in the Information Display as COAXIAL FRONT, COAXIAL REAR, OPTICAL FRONT, OPTICAL REAR or ANALOG. In addition, the Digital Indicators (A) (3) will light when one of the coax or optical inputs is selected, and

the Analog Indicator C will light when the analog inputs are selected.

When a digital input has been selected, the connection may be made to either the rear-panel Coax or Optical Digital Input **46** or the front-panel Coax or Optical Digital Input **1617**. When one of the Front-Panel Digital Inputs **1617** has been selected, the Front-Panel Input Indicator **D** will also light. CD Sync recordings may not be made from an analog input.

#### Step Three:

#### Track Incrementing

Press the Auto/Manual Button (3) to select how tracks will be numbered on the recorded disc.

- The default mode is Manual, as indicated by the Manual Indicator X being lit. In that mode, when recording from either digital or analog recordings, you must add track numbers manually by pressing the Track Increment Button 1 2 2 when you wish to increase the track number. This mode is recommended for recordings made from analog sources.
- The Auto mode will add track numbers automatically, in one of two ways. When track data is present on a digital recording, it will be carried over to the new copy disc. Thus, when the CD being played moves from one track to the next track, the copy disc will also increase the track number by one. Activate the Auto mode by pressing the Auto/Manual Button
   Once and note that the Manual Indicator x will go out.
- In the Auto mode, when recording from an analog source or a digital source with no track data, the track number will be increased when the CDR 26 receives silence for three seconds. After five seconds of silence, the recording will stop. To activate the Auto mode, press the Auto/Manual Button
   Once and note that the Manual Indicator will go out.

**Step Four:** To prepare for a recording, press the **Record Button T (B)**. The **Record Indicator P** will flash, and the word **BUSY** will briefly appear in the **Information Display (C)**. When the display returns to the track and running-time information, the unit is ready to record.

Step Five: Once the source material is playing, start the actual recording by pressing the Play/Select Button 20 ①. The Record Indicator P will stop flashing and the Information Display Y will begin to show the running time of the recording and the track data. Depending on which mode of track increment has been selected as described above, track numbers must be increased manually or they will be added automatically. Regardless of which mode has been selected, a track may be added at any time by pressing the Track Increment Button 11 1 12.

NOTE: If there is a pause in the playback signal for more than five seconds for digital recordings or 10 seconds for analog recordings, the CDR 26 will stop the recording. Also, when the Pause button is pressed during a recording, the track number will increase by one number and the recording will stop and must be restarted by pressing the Play/Select Button 20 (). When the recording is finished, press the Stop Button 19 (22).

Unlike conventional analog tape recorders, the CDR 26 does not require level setting when recordings are made from a digital source. Although the **Level Indicator** I will operate, this is only informative and the level may not be changed or adjusted. However, when you are making a recording from an external analog source such as a cassette recorder or the analog output of a receiver or preamp, you should adjust the input levels using the **Record Level Control** 13. Adjust the levels so that the blue/white segments of the display are almost all lit, and the red segments flash only occasionally. If the **OVER Indicator** I is constantly lit, the recording will be distorted and produce unacceptable quality.

To stop the recording, press the **Stop Button 19 20**. The recording will automatically stop if it takes more space than is available on the CD-R/RW disc. A **DISCFULL** message will appear to remind you that a new disc is needed.

**Step Six:** At the end of a recording, a **BUSY** message will appear briefly. The unit will then return to normal operation. Remember to finalize the disc after recording so that it may be used in other players.

#### Finalizing CD-R and CD-RW Discs

Finalizing is a simple process that completes the recording of a disc so that it may be used in other players. When a recording is finished, a disc must be finalized. Once that is done, a CD-R disc may not be added to. CD-RW discs are "locked" once they are finalized, but they may be unfinalized to permit additional recording or erasure.

Once all recording is completed on a disc, make certain that it is placed in the **Record Deck 15** to be finalized. If the disc has just been inserted into the deck, the CDR 26 will first read the Table of Contents data before displaying the number of tracks and the total time of the disc in the record-side **Information Display Y**.

To finalize the disc, first press the Finalize Button 13 **(FINALIZE** will flash in the **Information Display Y** and the **Record Indicator P** will light. Within eight seconds, press the Play/Select Button **2010** and the **FINALIZE** message will stop flashing and immediately be replaced by a **TOC WRITE** message, followed by a three-digit time indication, such as **1**:**1**. The **1**:**1** part of the message is the start of a countdown clock that will tell you how much time is remaining in the finalization process. When the display counts down to **D** : **D D** and the **Record Indicator P** goes out, the **Infor**mation Display Y will return to its normal indications and the finalization process is complete. The disc is now ready to be played in any compatible CD or DVD player. The CD Indicator R will remain lit to remind you that the disc is now a standard CD.

#### Unfinalizing and Erasing CD-RW Discs

CD-RW discs are unique in that they are both recordable and rewritable. This means that you may use them over again like a cassette tape. However, the process of reusing a CD-RW disc is slightly different from that used with tapes.

#### Unfinalizing a CD-RW Disc

To keep the material that is already recorded on a CD-RW disc but to add an additional track and erase single tracks, you must first unfinalize the disc. To do that, place the CD-RW disc in the **Record Deck 15** and wait until the Table of Contents data has been read.

To unfinalize a disc, first press the **Erase Button DISTINALIZE** will flash in the **Information Display** and the **Record Indicator** will light. Within eight seconds, press the **Play/Select**  Button 20 (1) and a TOC Erase message will appear in the Information Display Y followed by a three-digit time indication (e.g., **1** : **1 1**). The time indication part of the message is the start of a countdown clock that will tell you how much time is remaining in the unfinalization process. When the display counts down to **1** : **1 1** and the **Record Indicator P** goes out, the **Information Display Y** will return to its normal indications and the finalization process is complete. The CD-RW Indicator **R Q** will light to remind you that the disc is now ready to have tracks removed or added.

#### Erasing an Entire CD-RW Disc

To erase the entire contents of a CD-RW disc, it does not matter whether the disc has been finalized or not. To erase the disc, first press the Erase Button 12 so that DISC ERASE flashes in the Information Display Y and the Record Indicator P lights. Depending on whether or not the disc has been finalized, you may have to press the Erase Button **12** (**p**) a second time to display the **DISC ERASE** message. Within eight seconds, press the Play/Select Button 20 (1) and a DISC **ERASE** message will appear in the **Information** Display M followed by a three-digit time indication (e.g., **L**: **L**). The time indication part of the message is the start of a countdown clock that will tell you how much time is remaining in the erasure process. When the display counts down to **D** :**D** and the **Record Indicator P** goes out, the **Information Display Y** will return to its normal indications and the erasure process is complete. The disc is now totally erased and may be reused.

#### Erasing a Single Track

The individual tracks on a CD-RW disc may be erased one at a time, in reverse order, starting with the last track on the disc. Before individual tracks may be erased, the disc must be unfinalized. If the disc is finalized, follow the instructions above for unfinalizing before proceeding with these steps.

To erase the last track on a disc (remembering that it must first be unfinalized), first press the **Erase Button** 12 ① so that □ ⊥ TR ERASE flashes in the Information Display M and the Record Indicator P lights. Within eight seconds, press the Play/Select Button 20 ① and the □ ⊥ TR ERASE message will stop flashing and will be followed by a threedigit time indication (e.g., □ :0 3). The time indication part of the message is the start of a countdown clock that will tell you how much time is remaining in the

## CD RECORDING

erasure process. When the display counts down to **D** :**D** and the **Record Indicator P** goes out, the **Information Display Y** will return to its normal indications and the track has been erased. You may now repeat the procedure to erase additional tracks, working backward from the last track on the disc to the first, or return to normal operation.

**Important Note:** Tracks at the beginning or in the middle of the disc may not be erased until all of the tracks after them have been erased.

#### Important Note on Erasure and Finalization

**Times:** Regardless of the speed at which a disc was recorded, the CDR 26 will erase and finalize discs at the x4 speed to minimize the length of the process. However, in some cases, it may be necessary for the unit to repeat the erasure or finalization due to the nature of an individual disc. For that reason, it is normal for the time required to complete these steps to vary from one disc to another.

#### TROUBLESHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	SOLUTION	
Unit does not operate when Standby switch	No AC power	<ul> <li>Make certain AC power cord is plugged into a live outlet</li> <li>Check to see whether AC outlet is switch-controlled</li> </ul>	
or remote Power-On is pressed	Main Power Switch is off	Turn on Main Power	
Remote does not function	Wrong deck selected	<ul> <li>Press the CDP Button (4) to control the Play Deck (3):</li> <li>press the CDR Button (27) to control the Record Deck (15)</li> </ul>	
	<ul> <li>Dead batteries</li> </ul>	Replace both batteries	
	Sensor blocked	Remove obstructions from front panel or	
		connect a remote sensor to the Remote-In Jack	
Disc does not erase	CD-R disc in use	CD-R discs do not erase; only CD-RW discs may be erased	
Recorded CD-R disc does not play in another CD player or <b>DISC ERROR</b> message appears in play deck	CD-R disc not finalized	Finalize the CD-R disc in the CDR 26's record deck (see page 21)	
Recording suddenly stops	Input source stopped or paused	<ul> <li>Recordings will stop when the input source is paused for more than three seconds for digital recordings and 10 seconds for analog recordings</li> </ul>	

#### ERROR MESSAGES

MESSAGE	EXPLANATION AND PROBABLE CAUSE	SOLUTION
CHECK DISC	<ul> <li>A record-related button has been pressed when a finalized disc is in the Record Deck 15</li> <li>A record-related button has been pressed when a standard CD is in the Record Deck 15</li> </ul>	<ul> <li>Unfinalize the disc to add tracks to a CD-RW disc</li> <li>Replace the disc with a blank CD-R or CD-RW disc</li> <li>Replace the disc with a blank CD-R or CD-RW disc</li> </ul>
DATA DISC	A non-audio CD-ROM or a CD Video disc has been placed in the machine	<ul> <li>Only CD Audio and DTS<sup>®</sup> discs will play in the CDR 26; replace the disc</li> </ul>
DISC ERROR	<ul> <li>An unfinalized disc has been placed in the Play Deck 3</li> <li>A DVD has been placed in the unit</li> </ul>	<ul><li>Finalize the disc (see page 21)</li><li>Replace the disc; the CDR 26 does not play or dub DVDs</li></ul>
DISC FULL	There are only four seconds of record time remaining on the disc being recorded	<ul><li>Use another blank CD-R or CD-RW disc</li><li>Erase one or more tracks on a CD-RW disc</li></ul>
ERROR	<ul><li> The disc is not seated properly</li><li> There is a problem with the disc</li></ul>	<ul><li>Open the drawer and check to see that the disc is properly seated</li><li>Try another disc</li></ul>
FAILED	A dub has not been completed properly	<ul><li>Check the play disc</li><li>Repeat the dub process</li></ul>
FULL	More than 99 tracks have been recorded	• The CDR 26 does not record more than 99 tracks on a disc
NO AUDIO	• A record-related button has been pressed when a non-audio disc is in the Record Deck 15	Replace the disc with a blank CD-R or CD-RW Audio disc
ZAC-T	There is an internal problem with the CDR 26	Contact an authorized Harman Kardon service center

#### Signal Format

Playback Sampling Frequency D/A Conversion Oversampling

#### **Playback Specifications**

Frequency Response Playback S/N Playback Dynamic Range Playback THD Analog Audio Output Digital-Coaxial Output Headphone Output

#### **Record Specifications**

Digital Input Sample Rates Recording S/N: Analog Recording S/N: Digital Dub Mode Recording S/N: Digital External Source Recording Dynamic Range Recording THD Analog Input Sensitivity Digital Inputs (Direct Recording)

#### General

Power Requirement Power Consumption	110~240 VAC/50~ 20 Watts
	20 Walls
Dimensions	
Width	17-5/16"/440mm
Height	4-7/16"/112mm
Depth	13-15/16"/355mm
Weight	13 lb/5.8kg

Depth measurement includes knobs, buttons and connection jacks. Height measurement includes feet and chassis. All features and specifications are subject to change without notice.

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### harman/kardon<sup>®</sup>

44.1kHz 96kHz, Multi-Bit Delta-Sigma Conversion 128 Times

2Hz - 20,050Hz 100dB 95dB 0.01%/0dB  $2V RMS_{r} \pm 2dB$ 0.5Vpp/75Ω 1V RMS/32 $\Omega$  Load

32kHz – 96kHz 80dB Equal to Source Source -10dB 90dB 0.01%/0dB 330mV RMS  $47k\Omega = 0dB$ 44.1kHz, ±100 ppm/min.

~60Hz

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### Special Notice

Under certain circumstances, the CDR 26 may operate differently than the description in the owner's manual.

In particular, the unit will not be able to make a digital recording from an external source such as a CD player, DVD player or MiniDisc (MD) player (as shown on page 20 of the manual) when the player blocks a special electrical signal, called "Sub-Q," from the digital output. This signal contains some of the data needed to tell the CDR 26 that the original disc has started playing, and without it the CDR 26 cannot begin a recording. This is outside of our control, as some manufacturers design products this way to prevent digital copies from being made.

Should you find that a digital recording cannot be made from an external playback source, you may always use an analog connection to make the copy by pressing the Input Select Button on the front panel or remote control until **ANALOG** appears in the Information Display.

This does not affect the CDR 26's ability to make high-speed dubs using the unit's own internal playback deck, and in many cases you will not encounter this problem at all, since it is related to the brand of playback deck being used.

# read first! Important Safety Precautions!

#### CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION. To prevent electric shock, do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the Iterature accompanying the appliance

1. Read Instructions. All the safety and operating instructions should be read before the product is operated.

2. Retain Instructions. The safety and operating instructions should be retained for future reference.

3. Heed Warnings. All warnings on the product and in the operating instructions should be adhered to.

 Follow Instructions. All operating and use instructions should be followed.
 Cleaning. Unplug this product from the watt outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. Attachments. Do not use attachments not recommended by the product manufacturer, as they may cause hazards.

7. Water and Moisture. Do not use this product near water-for example, near a bathtub, wash bowl, kitchen sink or laundry tub; in a wet basement: near a swimming pool: or the like.

8. Accessories. Do not place this product on an unstable cart, stand, tripod, bracket or table. The product may fall, causing serious injury to a child or adult and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

9. A Product and Cart Combination Should Be Moved with Care. Quick stops, excessive force and uneven surfaces may cause the product and cart combination to overturn.



10. Ventilation. Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation, such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

11. Power Sources. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions. 12. Polarization. This product may be equipped with a polarized alternatingcurrent-line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug. 13. Power-Cord Protection. Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product. 14. Nonuse Periods. The power cord of the product should be unplugged from the outlet when left unused for long periods of time. 15. Outdoor Antenna Grounding. If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static char-ges. Article 810 of the National Electrical Code, ANSI/NFPA 70. provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, Location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure 1. 16. Lightning. For added protection for this product during a Lightning storm, or when it is Left unattended and unused for tong periods of time, unplug it from the watt outlet and disconnect the antenna or cable system This will prevent damage to the product due to lightning and power-tine surges. 17 Power Lines An outside antenna system should not be located in the vicinity of overhead power lines or other electric tight or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits, as contact with them might be fatal.

18. Overloading. Do not overload wall outlets, extension cords, or integral convenience receptacles, as this can result in a risk of fire or electric shock. 19. Object and Liquid Entry. Never push objects of any kind into this product through openings, as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill Liquid of any kind on the product. 20. Servicing. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel. 21. Damage Requiring Service. Unplug this product from the watt outlet and refer servicing to qualified service personnet under the following conditions:

a. The power-supply cord or the plug has been damaged; or

b. Objects have fallen onto, or liquid has been spilled into, the product; or

c. The product has been exposed to rain or water;  $_{\rm OI}$ 

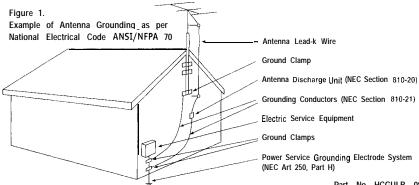
d. The product does not operate normally when following the operating instructions. Adjust only those controls that are covered by the operating instructions, as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation; or e. The product has been dropped or damaged in any way; or

f. The product exhibits a distinct change in performance; this indicates a need for service.

22. Replacement Parts. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

23. Safety Check. Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

24. Wall or Ceiling Mounting. The product should be mounted to a wall or ceiling only as recommended by the manufacturer. 25. Heat. The product should be situated away from heat sources such as radiators, heat registers, stoves or other products (including amplifiers) that produce heat.



Part No HCGULB 08100 LG Part # 3840R-G001C

#### harman/kardon Limited Warranty

The Harman Kardon products listed below are warranted for the period stated from the date of original purchase.

- Receivers, Tuners and Amplifiers 2 Years
- · Cassette Decks
- Compact Disc Players and Recorders
- + DVD Players

#### WHO IS PROTECTED BY THIS WARRANTY

Your Harman Kardon warranty protects the original owner of a Harman Kardon product, provided that the product was purchased within the continental United States, Alaska or Hawaii, from an authorized dealer, or was purchased by military personnel from an authorized military outlet. Warranty service is available only in the country of original purchase. For warranty information outside the continental United States, Alaska or Hawaii, please contact your local dealer or distributor. Warranty service is available as long as the original bill of sale is presented when warranty service is required. Please attach a copy of your bill of sale to this warranty statement and put it in a safe place.

#### WHAT IS COVERED

Your Harman Kardon warranty covers all defects in material and workmanship with the following specified exceptions: (1) damage caused by accident, unreasonable use or neglect (including the lack of reasonable and necessary maintenance); (2) damage occurring during shipment (claims must be presented to the carrier); (3) damage to, or deterioration of, any accessory or decorative surface; (4) damage resulting from failure to follow instructions contained in your owner's manual; (5) damage resulting from the performance of repairs by someone other than an authorized Harman Kardon warranty station; (6) any Harman Kardon unit on which the serial number has been effaced, modified or removed: (7) units used for other than home use. This warranty covers only actual defects within the product itself, and does not cover the cost of installation or removal from a fixed installation. normal set-up or adjustments, claims based on misrepresentation by the seller or performance variations resulting from installation-related circumstances such as source quality or AC power.

#### HOW TO OBTAIN WARRANTY SERVICE

If your Harman Kardon product ever needs service, please return the product to your dealer. If this is not possible and you live in the continental United States, Alaska or Hawaii, please visit our website at http://www.harmankardon.com/. or call 1-800-422-8027 for the location of the nearest warranty station, or write to Harman Kardon, Incorporated, 250 Crossways Park Drive, Woodbury, NY 11797 (Attention: Customer Service). You'll need to present your original bill of sale to the warranty station to establish the date of purchase.

#### WHO PAYS FOR WHAT

Harman Kardon will pay all expenses for labor and materials for all repairs covered by this warranty. If necessary repairs are not covered by this warranty, or if a unit is examined which is not in need of repair, you will be charged for the repairs or examination.

1 Year

1 Year

1 Year

The owner must pay any shipping charges incurred in getting your Harman Kardon product to a Harman Kardon Authorized Warranty Station located within the continental United States, Alaska or Hawaii, We will pay reasonable return shipping charges to any location in the continental United States, Alaska or Hawaii, if the repairs are covered under the warranty. Please be sure to save the original shipping cartons, because a charge will be made for additional cartons.

#### INFORMATION

If you have questions regarding the installation or operation of this unit, please call Customer Service at 1-800-422-8027, or e-mail us at websupport@harman.com, or write to us at Harman Kardon, Incorporated, 250 Crossways Park Drive, Woodbury, NY 11797 (Attention: Customer Service).

LIMITATION ON IMPLIED WARRANTIES IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE LENGTH OF THIS WARRANTY, UNLESS OTHERWISE PROVIDED BY STATE LAW.

EXCLUSION OF CERTAIN DAMAGES HARMAN KARDON'S LIABILITY IS LIMITED TO THE REPAIR OR REPLACEMENT, AT OUR OPTION, OF ANY DEFECTIVE PRODUCT AND SHALL IN NO EVENT INCLUDE INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLU-SION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

We sincerely thank you for your expression of confidence in Harman Kardon products. This equipment has been painstakingly assembled by highly trained craftspeople. It should give you many years of musical enjoyment.

#### harman kardon

8500 Balboa Blvd., Northridge, CA 91329 250 Crossways Park Drive, Woodbury, NY 11797

Part No: 1119-047 LO Part No: 3840R-WODAV